



tionally, to provide a post-landing controlled environment for the Orbiter's sensitive electronic equipment when the spacecraft's environmental control system is turned off.

APS feels that its NASA work has future spinoff potential but company officials say that the real benefit of APS' association with NASA came from awareness of a NASA goal that prompted the company to refocus its research and development strategy. One facet of NASA's Microgravity Science and Applications program involves establishment of "centers of excellence"—similar to an existing materials processing center at Massachusetts Institute of Technology—to stimulate government/industry/academia collaboration in specific areas of research. APS awareness of the NASA program sparked initiatives that led to development of a joint research and development effort which will involve APS and several universities in the company's vicinity. Thus, says the company, its association with NASA has had the two-pronged effect of contributing to an expanded APS market and broadening the company's research and development horizons. ▲



Advanced Process Systems, Inc. (APS), Louisville, Kentucky, is a small but growing business engaged in application of advanced technology to the design and production of equipment used principally in manufacturing processes, generally self-contained components of larger manufacturing systems. APS has designed and fabricated such diverse equipment as solvent, resin and oil recovery systems, juice and wine concentrating plants, carbon dioxide scrubbers and other environmental control systems. APS is also establishing research and development ties with universities, an area of effort that stemmed from company

awareness of new technological opportunities resulting from a contractual association with NASA. In the photo, company and university officials confer in the University of Louisville's robotics laboratory.

Founded in 1982, APS won a NASA contract in October, 1983 for design and construction of a self-contained environmental control system for ground use on the Space Shuttle Orbiter. Mounted on a flat-bed truck, the Portable Purge Unit is designed to protect flight and ground crews from toxic fumes and, addi-